## APPENDIXES.

APPENDIX A .- SCOPE OF THE CENSUS OF MANUFACTURES.

The census does not cover establishments which are idle during the entire year or those which had a value of products of less than \$500, or the manufacturing done in educational, eleemosynary, and penal institutions.

The censuses of 1919, 1914, 1909, and 1904 were taken in conformity with the provision of the law which directs that the canvass shall "be confined to manufacturing establishments conducted under what is known as the factory system, exclusive of the so-called neighborhood, household, and hand industries." In arranging for the census, a broad construction is given to the term "factory system." In order that the factory system should be properly represented, it was decided to include all establishments with the following exceptions:

- 1. All establishments reporting products valued at less than \$500 during the census year.
- 2. Establishments doing only work to the order of the individual consumer, such as custom tailoring, dressmaking, millinery, and shoemaking establishments, the aim being to confine the census to establishments producing for the general or wholesale trade. This rule did not apply to large concerns manufacturing to meet special orders.
- 3. Establishments engaged in the building industries other than those manufacturing building materials for the general trade.
- 4. Establishments engaged in the so-called neighborhood industries and hand trades, such as blacksmithing, harness making, and tinsmithing, in which little, if any, power machinery is used, and which usually do only a local business.
- 5. Small custom flour, feed, and grist mills and sawmills grinding or sawing for toll or for local consumption exclusively.
- 6. Retail stores which incidentally manufacture on a small scale, particularly where it is impossible to distinguish the data relating to the manufacturing business from those relating to the mercantile business.
- 7. Educational, eleemosynary, and penal institutions engaged in manufacturing industries.

APPENDIX B.—METHOD FOR OBTAINING AN INDEX OF MATERIALS USED IN THE SLAUGHTERING AND MEAT-PACKING AND LEATHER INDUSTRIES.

In a number of industries the physical data collected by the Census Bureau are not strictly homogeneous. In 16 of the industries discussed in Chapter III there is some single physical unit of measurement, such as tons of pig iron, number of vehicles, or spindles in operation. In the slaughtering and meat-packing industry many different materials are used and many different products manufactured. Likewise in the leather industry the raw materials are of many kinds and the products varied. These two industries, in which there is no single basic unit, are of such significance as to warrant special consideration.

Composite indexes of materials used have been obtained by using a simple weighted arithmetic average, the weights employed being the value per unit of each commodity in 1914. As can be readily seen, in the slaughtering and meat-packing index, the variations in beeves are most important, whereas in the leather industry cattle hides are the most significant item. The data and computation are given in Tables 71 and 72.

Table 71.—Construction of Index Numbers of Materials Used for Slaughtering and Meat-Packing Industry: 1889 to 1919.

Census Year.	SLAUGHTERING AND MEAT PACKING.						
	Beeves (weight 11).	Calves (weight 2).	Sheep (weight r).	Hogs (weight 3).	Weighted total.	Index number.	
w-t	Thousands.	Thousands.	Thousands.	Thousands.	Thousands.		
1889	5,422	300	6, 178	22,349	133,467	100,0	
1899	5, 526	884	9,110	30, 596	163,452	122. 5	
1904	7, 148	1,568	10,875	30,978	185, 573	139. 0	
1909	8, 115	2,505	12,256	33,871	208, 144	x 55. 9	
1914	7, 149	2,019	15,944	34,442	201,947	151. 3	
1919	10,819	4,396	13,497	44,521	274,86x	205. 9	

Table 72.—Construction of Index Numbers of Materials Used for the Leather Industry: 1899 to 1919.

CENSUS YEAR.	Leather, Tanned, Curried, and Finished.					
	Cattle hides (weight 17).	Calfskins (weight 4).		Sheep and lamb skins (weight 1).	Weighted total.	Index number.
1899. 1904.	15, 839 17, 582 18, 360	8, 944 12, 481 19, 733	Thousands. 48,047 47}666 48,078	Thousands. 24, 508 27, 492 26, 082	Thousands. 377, 594 423, 976 465, 212	100. 0 112. 3 123. 2
1914	• • • • • • • • • • • • • • • • • • • •	16,068 12,894	37,756 55,429	40,090 22,766	438, 904 506, 915	134. 2

## APPENDIX C.—INDUSTRIES CLASSED AS MISCELLANEOUS AND HAVING ESTABLISHMENTS AMONG 4,813 CENTRAL-OFFICE GROUPS: 1919.

Aeroplanes, seaplanes, airships, and parts.

Agricultural implements.

Ammunition.

Artificial flowers.

Artificial limbs.

Artists' materials.

Asbestos products, not including steam packing.

Belting and hose, rubber.

Boots and shoes, rubber.

Brooms.

Brushes.

Buttons.

Combs and hairpins, except those made from metal or rubber.

Dairymen's, poultrymen's, and apiarists' supplies.

Dental goods.

Electrical machinery, apparatus, and supplies.

Engravers' materials.

Fancy articles, not elsewhere specified.

Feathers and plumes.

Fire extinguishers, chemical.

Fireworks.

Foundry supplies.

Fuel, manufactured.

Fur goods.

Furs, dressed.

Hair work.

.Hand stamps.

Hats, straw.

Ice, manufactured.

Instruments, professional and scientific.

Ivory, shell, and bone work, not includ-

ing combs and hairpins.

Jewelry and instrument cases.

Mattresses and spring beds, not elsewhere specified.

Models and patterns, not including paper patterns.

Mucilage, paste, and other adhesives, not elsewhere specified.

Musical instruments and materials, not specified.

Musical instruments, organs.

Musical instruments, pianos.

Musical instruments, piano and organ materials.

Optical goods.

Paving materials.

Pencils, lead.

Phonographs and graphophones.

Photographic apparatus.

Photographic materials.

Roofing materials.

Rubber tires, tubes, and rubber goods, not elsewhere specified.

Sand and emery paper and cloth.

Shipbuilding, steel.

Shipbuilding, wooden, including boat

building.

Signs and advertising novelties.

Soda-water apparatus.

Sporting and athletic goods.

Stationery goods, not elsewhere specified.

Steam packing.

Surgical appliances.

Toys and games.

Umbrellas and canes.

Washing machines and clothes wringers.

Window shades and fixtures.

Wood carpet.

APPENDIX D.—INDUSTRIES NOT REPRESENTED BY ESTABLISHMENTS IN CENTRAL-OFFICE COMBINATIONS, WITH NUMBER OF ESTABLISHMENTS, AVERAGE NUMBER OF WAGE EARNERS, AND VALUE OF PRODUCTS: 1919.

INDUSTRY GROUP.	Number of establish- ments.	Average number of wage earners.	Value of products.
Total	1,367	31,333	<b>\$</b> 185, 198, 843
Butter, reworking	5	47	2,229,035
Card cutting and designing	75	1,148	5,323,349
Cardboard, not made in paper mills		1,425	9, 138, 415
China decorating, not including that done in potteries	43	244	866, 762
Cloth sponging and refinishing	67	1,206	3,690,858
Enameling	74	694	2,644,763
Engraving, wood	55	235	r, 153, 618
Graphite, ground and refined	24	497	2, 239, 587
Haireloth	18	425	3,315,113
Hammocks	6	64	255: 755
Tapanning	36	295	771, 143
Lapidary work	124	1,155	30,051,460
Lard, not made in slaughtering and meat-packing establishments.	1 ' 1	13	219,660
Linen goods.	10	1,890	6, 998, 046
Millstones	12	38	66,806
Paper patterns	10	403	1,528,382
Pens, fountain and stylographic		3,207	15,996,808
Pens, gold	15	416	1,801,460
Pens. steel.	4	807	1,679,541
Pipes, tobacco	56	2, 539	II, 553, 777
Pulp, from fiber other than wood	] - 1	64	524,444
Pumps, not including power pumps	1 1	5, 384	31,656,438
Rules, ivory and wood	13	168	480, 543
Show cases		1,857	8, 294, 308
Smelting and refining, metals, not elsewhere specified <sup>1</sup>	23	2,041	20,074,504
Statuary and art goods.	195	I, 466	5,019,521
Stencils and brands	84	417	1,597,785
Theatrical scenery		149	I,067,033
Wheelbarrows	1 1	201	1,679,538
Whips	26	717	2,986,285
Windmills		1,932	9,932,585
Other industries <sup>2</sup>	5	99	36T, 43T

<sup>&</sup>lt;sup>1</sup> Includes "smelting and refining, antimony" and "smelting and refining, tin," to avoid disclosing individual operations.

<sup>&</sup>lt;sup>2</sup> Comprises 3 industries ("Straw goods, not elsewhere specified;" "whalebone cutting;" and "wood carpet") combined to avoid disclosing individual operations.